

## DATA COLLECTOR WITH INTEGRAL SPEED SENSOR

### Abstract of the Disclosure

A data collector having an integrated laser tachometer. The data collector includes, within a housing that can be held by a single hand, circuitry for receiving a vibration signal to be digitized, as well as an optical system for receiving light from outside said housing to be converted to a digital tachometer signal. Digital signal processing circuits within the housing receive, store or process the digitized vibration signal and/or the digital tachometer signal, for the purpose of predictive maintenance. The housing of the data collector also holds a display and input keys, so that an operator may use the same hand for holding and controlling the data collector, and for holding the integrated laser tachometer. This frees a hand for holding an accelerometer or for other purposes. Use of a data collector with an integrated laser tachometer is thus substantially more convenient than using a data collector with a separate, nonintegrated laser tachometer attachment.

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